

FIGURE 1

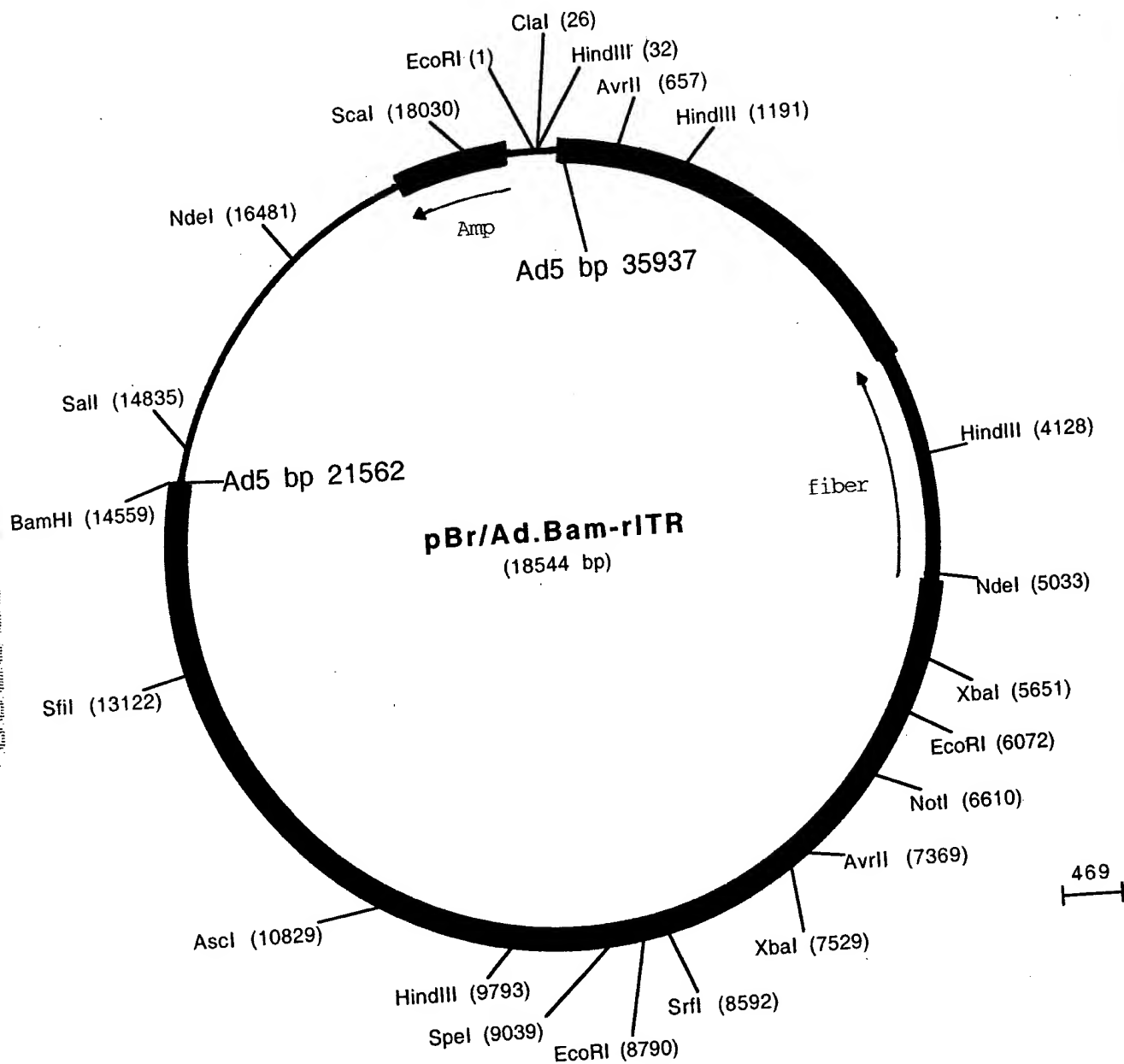


Figure 2

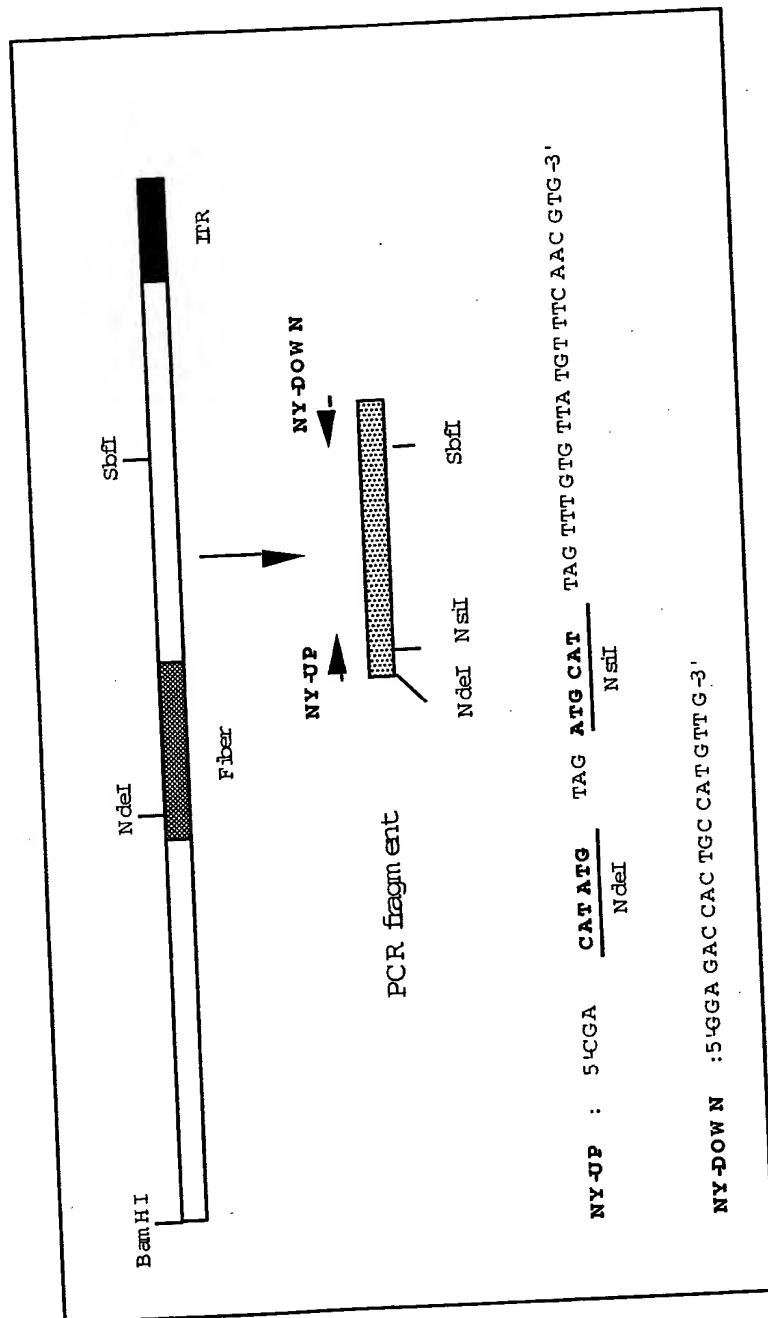
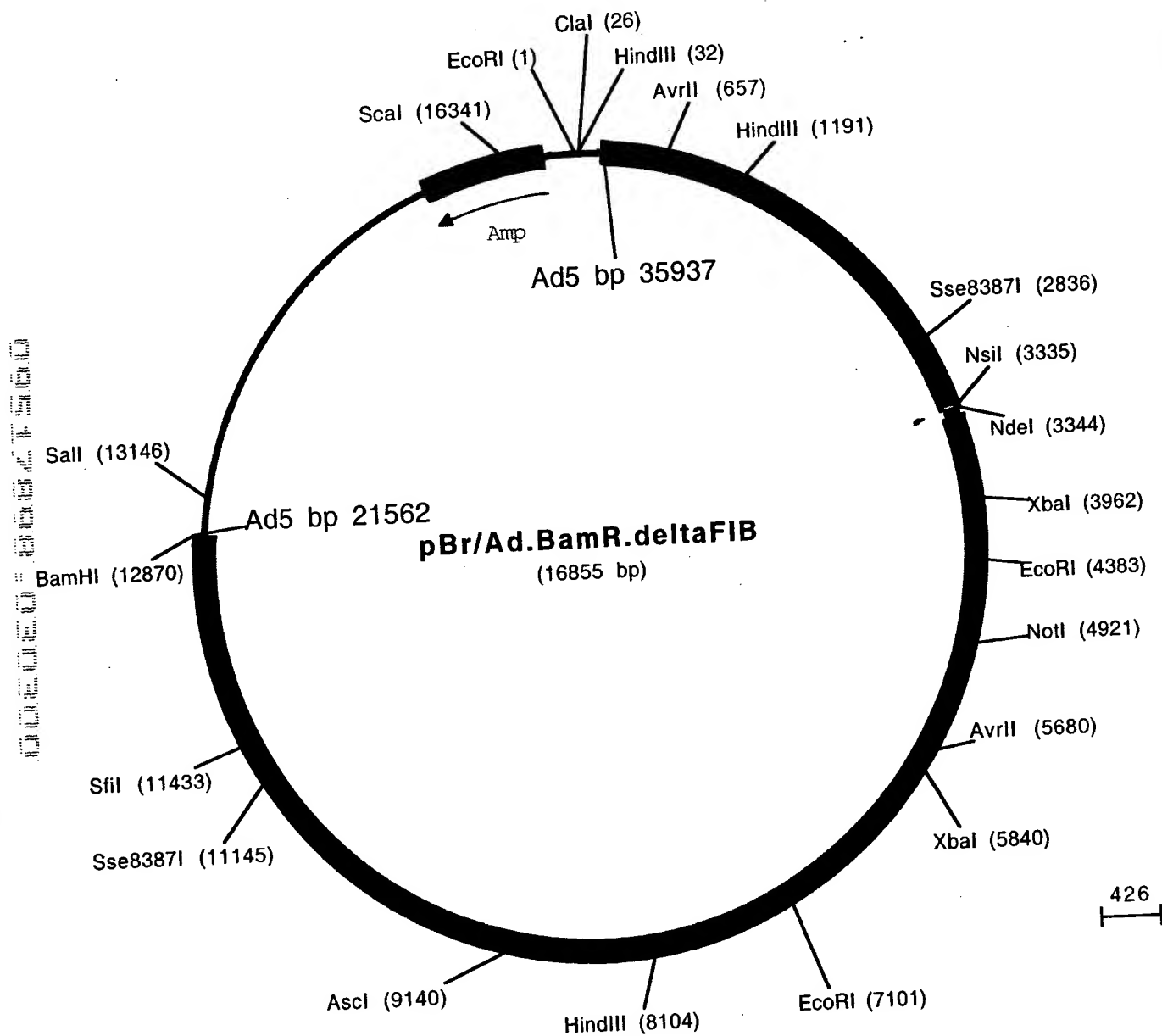


FIGURE 3



[illegible]

**ATGAAGCGCGCAAGACCGTCTGAAGATACCTTCAACCCCGTGTATCCATATGAAGATGAAAGCAGCT**  
CACAACACCCCTTTATAAACCCCTGGTTTCATTTCTCAAATGGTTTTGCACAAAGCCCAGATGGAGT  
TCTAACTCTTAAATGTGTTAATCCACTCACTACCGCCAGCGGACCCCTCCAACCTTAAAGTTGGAAGC  
AGTCTTACAGTAGATACTATCGATGGGTCTTTGGAGGAAAATATAACTGCCGAAGCGCCACTCACTA  
AAACTAACCCTCCATAGGTTTATTAATAGGATCTGGCTTGCAAACAAAGGATGATAAAGTTGTTTT  
ATCGCTGGGAGATGGGTTGGTAACAAAGGATGATAAAGTTATCGCTGGGAGATGGGTTAATA  
ACAAAAATGATGTACTATGTGCCAACTAGGACATGGCCTTGTGTTTGACTCTTCCAATGCTATCA  
CCATAGAAAAACAACACCTTGTGGACAGGCGCAAAACCAAGCGCCAAGTGTGTAATTAAAGAGGGAGA  
AGATTCCCCAGACTGTAAGCTCACTTTAGTTCTAGTGAAGAATGGAGGACTGATAAATGGATACATA  
ACATTAATGGGAGCCTCAGAATATACTAACACCTTGTTTAAAAACAATCAAGTTACAATCGATGTAA  
ACCTCGCATTTGATAATACTGGCCAAATTATTACTTACCTATCATCCCTTAAAGTAACCTGAACCT  
TAAAGACAACCAAAACATGGCTACTGGAACCATAACCAAGTGCCAAAGGCTTCATGCCCAGCACCACC  
GCCTATCCATTTATAACATACGCCACTGAGACCCTAAATGAAGATTACATTTATGGAGAGTGTTACT  
ACAAATCTACCAATGGAAGTCTCTTTCCACTAAAAGTTACTGTCACTAAACAGACGTATGTTAGC  
TTCTGGAATGGCCTATGCTATGAATTTTTCATGGTCTCTAAATGCAGAGGAAGCCCCGGAAACTACC  
GAAGTCACTCTCATTACCTCCCCCTCTTTTTTTCTTATATCAGAGAAGATGACT**TGA**ATGCATTAG

FIGURE 5

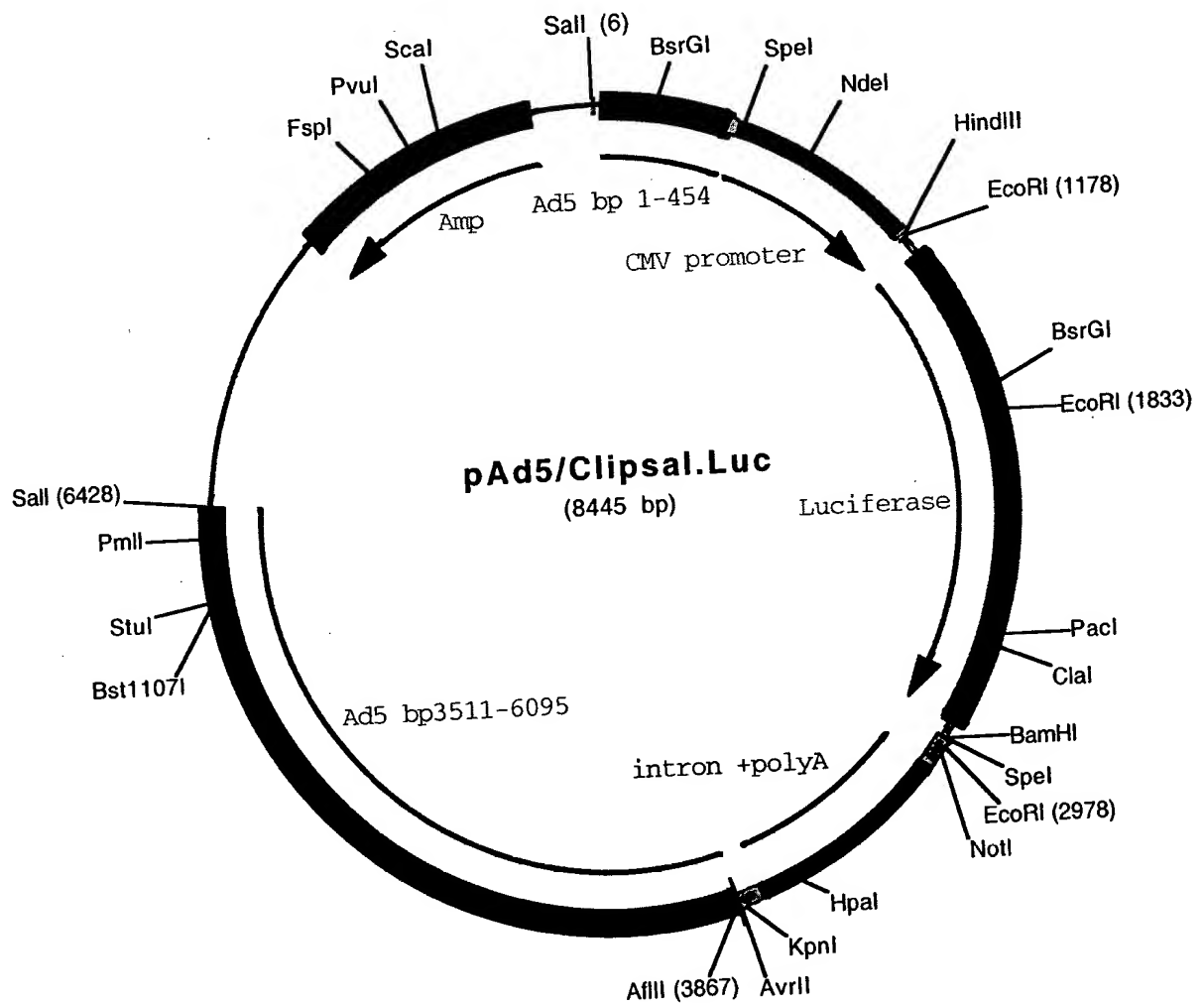
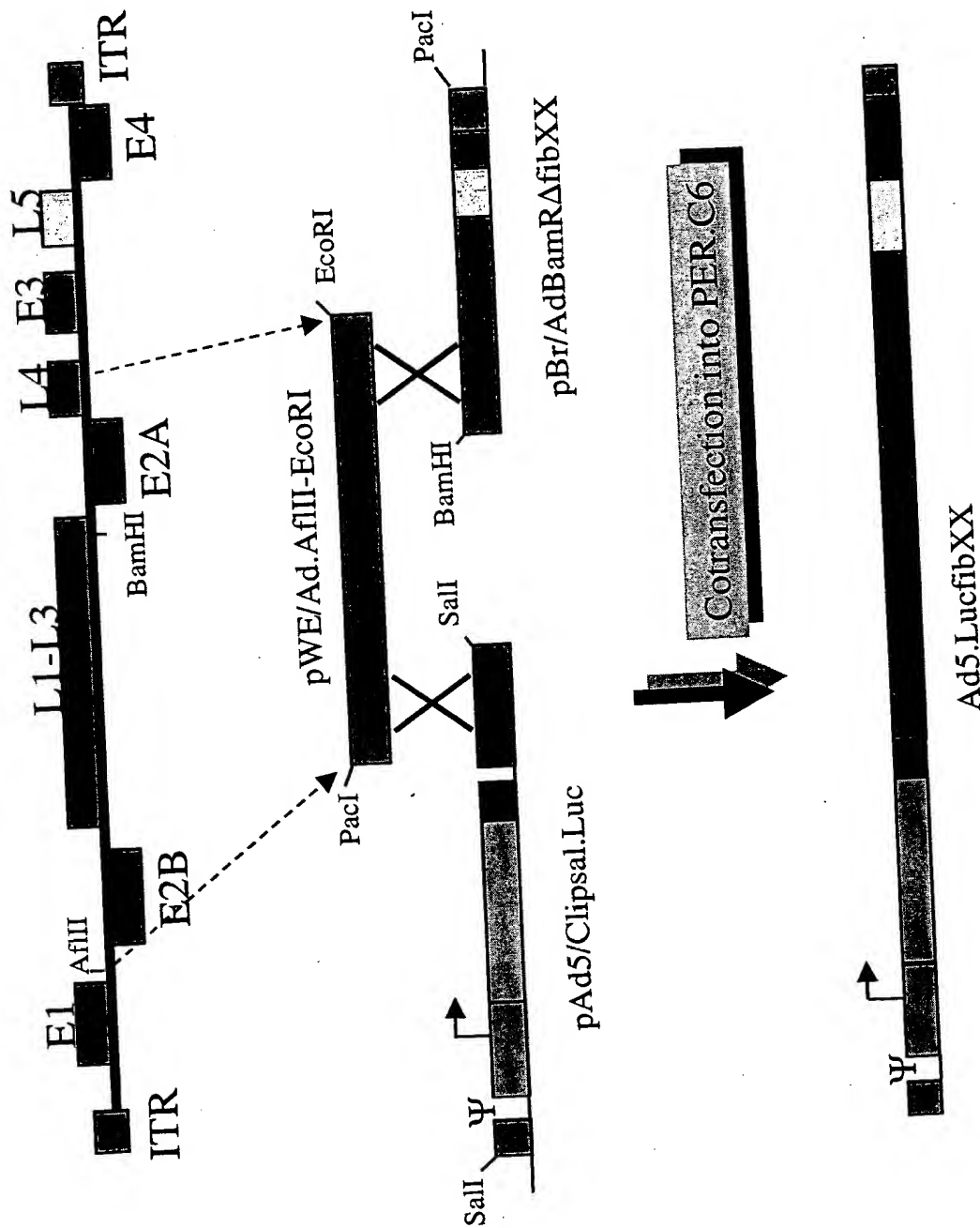


Figure 6: Generation of (chimaeric) adenoviruses



Alignment Report of alignment.DNA, using Clustal met  
 Wednesday, March 31, 1999 16:13

Weighted residue weight table.

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1  ATGGC-CAAACGAGCTCGGCTAAGCAGCTCCTTCAATCCGGTCTACCCCT Fiber 16 Genbank
1  ATG[AAG]C[GCG]C[A]AG[A]C[G]TCT[G]A[A-GATA]CCCTTCAA[C]C[C]GT[G]TA[T]CC[A]T Ad5/16 Fiber DNA

50  ATGAAGATGAAAGCAGCTCACAAACACCCCTTTATAAACCCCTGGTTTCATT Fiber 16 Genbank
50  ATGAAGATGAAAGCAGCTCACAAACACCCCTTTATAAACCCCTGGTTTCATT Ad5/16 Fiber DNA

100 TCCTCAAATGGTTTTTGCACAAAGCCCAGATGGAGTTCTAACTCTTAAATG Fiber 16 Genbank
100 TCCTCAAATGGTTTTTGCACAAAGCCCAGATGGAGTTCTAACTCTTAAATG Ad5/16 Fiber DNA

150 TGTTAATCCACTCACTACCGCCAGCGGACCCCTCCAACCTTAAAGTTGGAA Fiber 16 Genbank
150 TGTTAATCCACTCACTACCGCCAGCGGACCCCTCCAACCTTAAAGTTGGAA Ad5/16 Fiber DNA

200 GCAGTCTTACAGTAGATACTATCGATGGGTCTTTGGAGGAAAATATAACT Fiber 16 Genbank
200 GCAGTCTTACAGTAGATACTATCGATGGGTCTTTGGAGGAAAATATAACT Ad5/16 Fiber DNA

250 GCCG[C]AGCGCCACTCACTAAAACCTAACCCTCCATAGGTTTATTAATAGG Fiber 16 Genbank
250 GCCG[A]AGCGCCACTCACTAAAACCTAACCCTCCATAGGTTTATTAATAGG Ad5/16 Fiber DNA

300 ATCTGGCTTGCAAACAAAGGATGATAAACTTTGTTTATCGCTGGGAGATG Fiber 16 Genbank
300 ATCTGGCTTGCAAACAAAGGATGATAAACTTTGTTTATCGCTGGGAGATG Ad5/16 Fiber DNA

350 GGTGGTAACAAAGGATGATAAACTATGTTTATCGCTGGGAGATGGGTTA Fiber 16 Genbank
350 GGTGGTAACAAAGGATGATAAACTATGTTTATCGCTGGGAGATGGGTTA Ad5/16 Fiber DNA

400 ATAACAAAAAATGATGTACTATGTGCCAAACTAGGACATGGCCTTGTTGTT Fiber 16 Genbank
400 ATAACAAAAAATGATGTACTATGTGCCAAACTAGGACATGGCCTTGTTGTT Ad5/16 Fiber DNA

450 TGACTCTTCCAATGCTATCACCATAGAAAAACAACACCTTGTTGGACAGGCG Fiber 16 Genbank
450 TGACTCTTCCAATGCTATCACCATAGAAAAACAACACCTTGTTGGACAGGCG Ad5/16 Fiber DNA

500 CAAAACCAAGCGCCAACTGTGTAATTAAAGAGGGAGAAGATTCCCCAGAC Fiber 16 Genbank
500 CAAAACCAAGCGCCAACTGTGTAATTAAAGAGGGAGAAGATTCCCCAGAC Ad5/16 Fiber DNA

550 TGTAAGCTCACTTTAGTTCTAGTGAAGAATGGAGGACTGATAAATGGATA Fiber 16 Genbank
550 TGTAAGCTCACTTTAGTTCTAGTGAAGAATGGAGGACTGATAAATGGATA Ad5/16 Fiber DNA

600 CATAACATTAATGGGAGCCTCAGAATATACTAACACCTTGTTTAAAAACA Fiber 16 Genbank
600 CATAACATTAATGGGAGCCTCAGAATATACTAACACCTTGTTTAAAAACA Ad5/16 Fiber DNA

650 ATCAAGTTACAATCGATGTAAACCTCGCATTTGATAATACTGGCCAAATT Fiber 16 Genbank
650 ATCAAGTTACAATCGATGTAAACCTCGCATTTGATAATACTGGCCAAATT Ad5/16 Fiber DNA

700 ATTACTTACCTATCATCCCTTAAAGTAACCTGAACCTTTAAAGACAACCA Fiber 16 Genbank
700 ATTACTTACCTATCATCCCTTAAAGTAACCTGAACCTTTAAAGACAACCA Ad5/16 Fiber DNA

750 AAACATGGCTACTGGAACCATAAACCAGTGCCAAAGGCTTCATGCCCAGCA Fiber 16 Genbank
750 AAACATGGCTACTGGAACCATAAACCAGTGCCAAAGGCTTCATGCCCAGCA Ad5/16 Fiber DNA

800 CCACCGCCTATCCATTTATAACATACGCCACTGAGACCCTAAATGAAGAT Fiber 16 Genbank
800 CCACCGCCTATCCATTTATAACATACGCCACTGAGACCCTAAATGAAGAT Ad5/16 Fiber DNA

850 TACATTTATGGAGAGTGTTACTACAAATCTACCAATGGAACCTCTCTTTCC Fiber 16 Genbank
850 TACATTTATGGAGAGTGTTACTACAAATCTACCAATGGAACCTCTCTTTCC Ad5/16 Fiber DNA

900 ACTAAAAGTTACTGTACACTAAACAGACGTATGTTAGCTTCTGGAATGG Fiber 16 Genbank
900 ACTAAAAGTTACTGTACACTAAACAGACGTATGTTAGCTTCTGGAATGG Ad5/16 Fiber DNA

950 CCTATGCTATGAATTTTTTCATGGTCTCTAAATGCAGAGGAAGCCCCGGAA Fiber 16 Genbank
950 CCTATGCTATGAATTTTTTCATGGTCTCTAAATGCAGAGGAAGCCCCGGAA Ad5/16 Fiber DNA

1000 ACTACCGAAGTCACTCTCATTACCTCCCCCTTCTTTTTTTCTTATATCAG Fiber 16 Genbank
1000 ACTACCGAAGTCACTCTCATTACCTCCCCCTTCTTTTTTTCTTATATCAG Ad5/16 Fiber DNA

1050 AGAAGATGACTGA Fiber 16 Genbank
1050 AGAAGATGACTGAATGCATTAGTTTGTGTTATGTTTCAACGTGTTTATTT Ad5/16 Fiber DNA

1062 Fiber 16 Genbank
1100 TCAATTG Ad5/16 Fiber DNA

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Decoration 'Decoration #1': Box residues that differ from Fiber 16 Genbank.

Alignment Report of alignment.prot, using [ ] method with PAM250 residue weight tab.  
 Wednesday, March 31, 1999 16:19

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1  MAKRARLS[S]-SFNPVYPYEDESSSQHPFIN genbank Fiber 16
1  M[KRAR[P]S[EDT]FNPFVYPYEDESSSQHPFIN chimeric Ad5/Fib16

30  PGFISSNGFAQSPDGVLTCLKVNPLTTASG genbank Fiber 16
30  PGFISSNGFAQSPDGVLTCLKVNPLTTASG chimeric Ad5/Fib16

60  PLQLKVGSSSLTVDTIDGSLEENITAAAPLT genbank Fiber 16
60  PLQLKVGSSSLTVDTIDGSLEENITAAAPLT chimeric Ad5/Fib16

90  KTNHSIGLLIGSGLQTKDDKLCCLSLG DGLV genbank Fiber 16
90  KTNHSIGLLIGSGLQTKDDKLCCLSL[E]DGLV chimeric Ad5/Fib16

120 TKDDKLCCLSLG DGLITKNDVLC AKLGHGLV genbank Fiber 16
120 TKDDKLCCLSLG DGLITKNDVLC AKLGHGLV chimeric Ad5/Fib16

150 FDSSNAIT IENNTLWTGAKPSANCVIKEGE genbank Fiber 16
150 FDSSNAIT IENNTLWTGAKPSANCVIKEGE chimeric Ad5/Fib16

180 DSPDCKLTLVLVKN GGLINGYITLMGASEY genbank Fiber 16
180 DSPDCKLTLVLVKN GGLINGYITLMGASEY chimeric Ad5/Fib16

210 TNTLFKNNQVTIDVNLA FDN TGQ IITYLSS genbank Fiber 16
210 TNTLFKNNQVTIDVNLA FDN TGQ IITYLSS chimeric Ad5/Fib16

240 LKSNLNF KDNQNMATGTITS AKGFMPSTTA genbank Fiber 16
240 LKSNLNF KDNQNMATGTITS AKGFMPSTTA chimeric Ad5/Fib16

270 YPFITYATETL NEDYIYGECYYKSTNGTLF genbank Fiber 16
270 YPFITYATETL NEDYIYGECYYKSTNGTLF chimeric Ad5/Fib16

300 PLKVTVT LNRRLASGMAYAMNFSWSLNAE genbank Fiber 16
300 PLKVTVT LNRRLASGMAYAMNFSWSLNAE chimeric Ad5/Fib16

330 EAPETTEVTLITSPFFFSYIREDD genbank Fiber 16
330 EAPETTEVTLITSPFFFSYIREDD chimeric Ad5/Fib16

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Decoration 'Decoration #1': Box residues that differ from genbank Fiber 16 .



FIG. 8

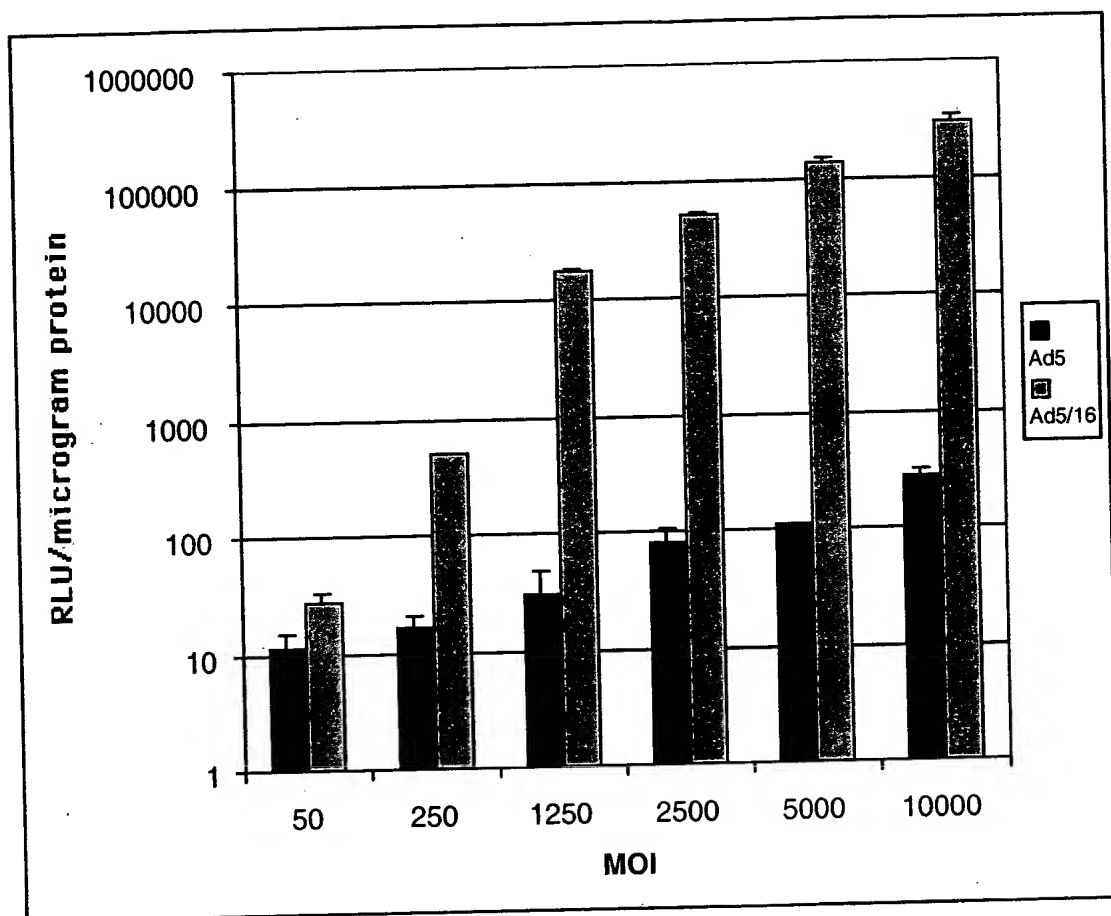


FIG. 9

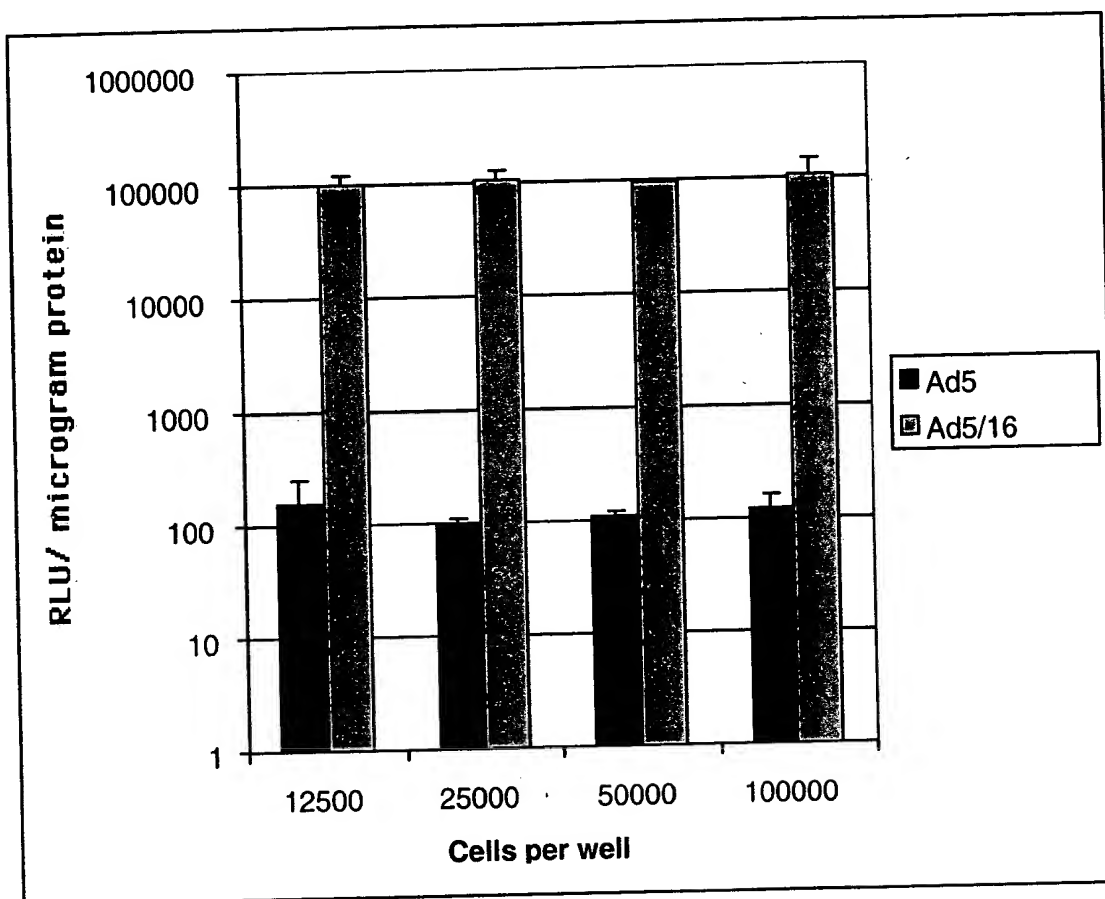


FIG. 10

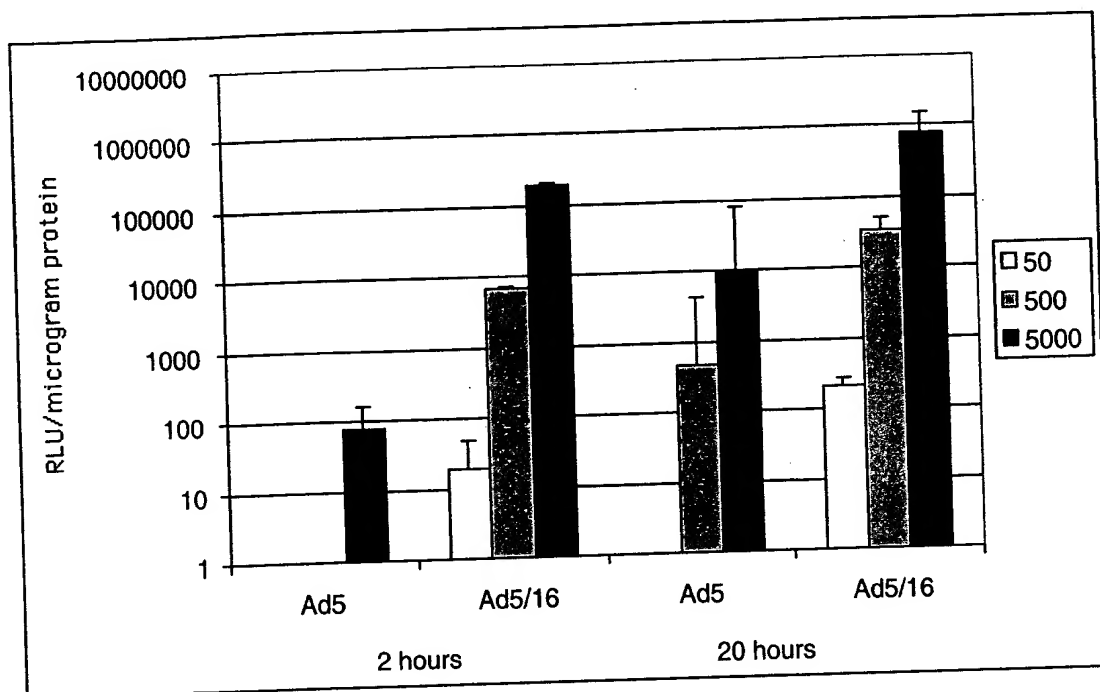


FIGURE 11

Synoviocytes infected with Ad.TK

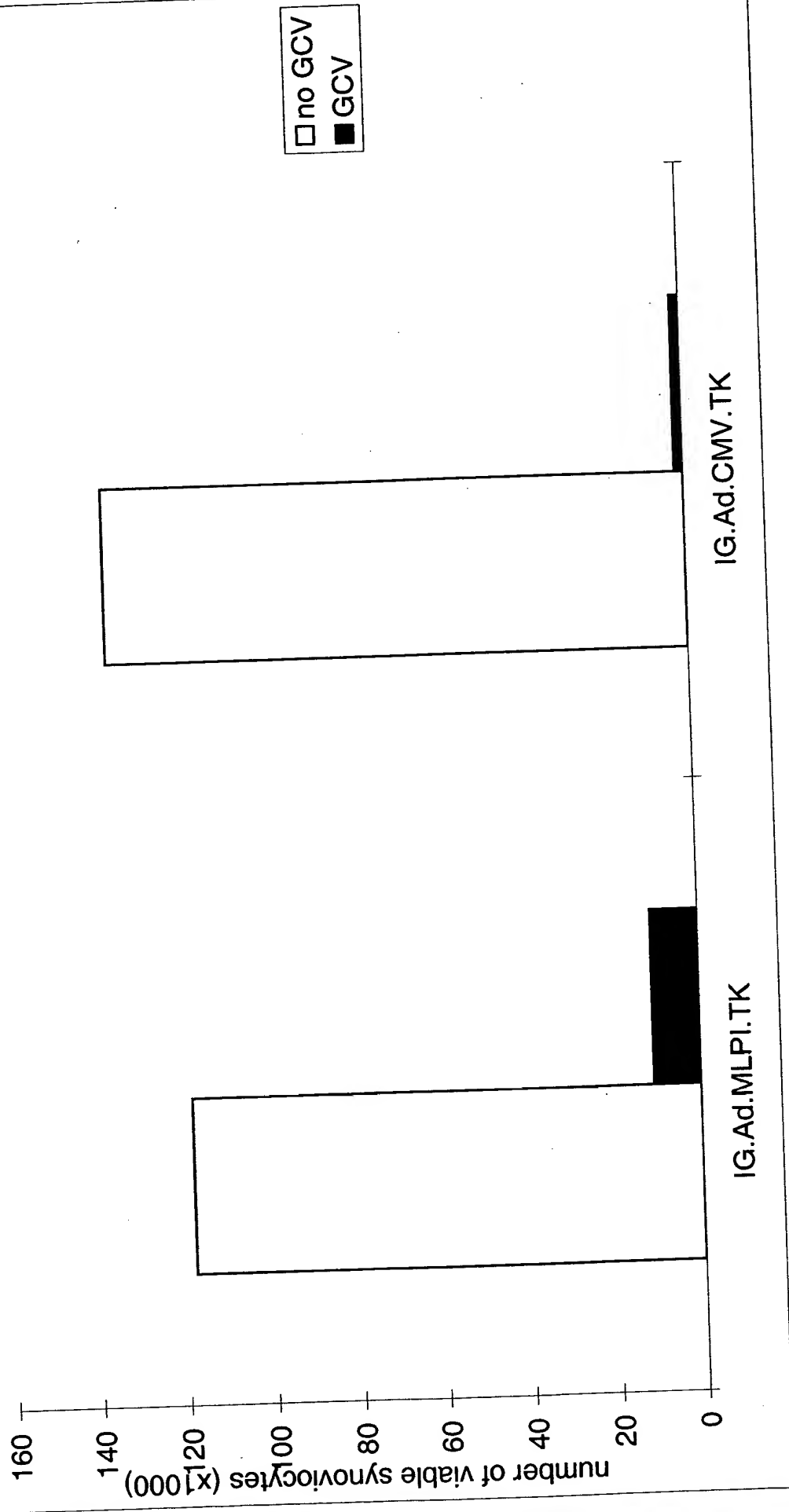


Figure 12

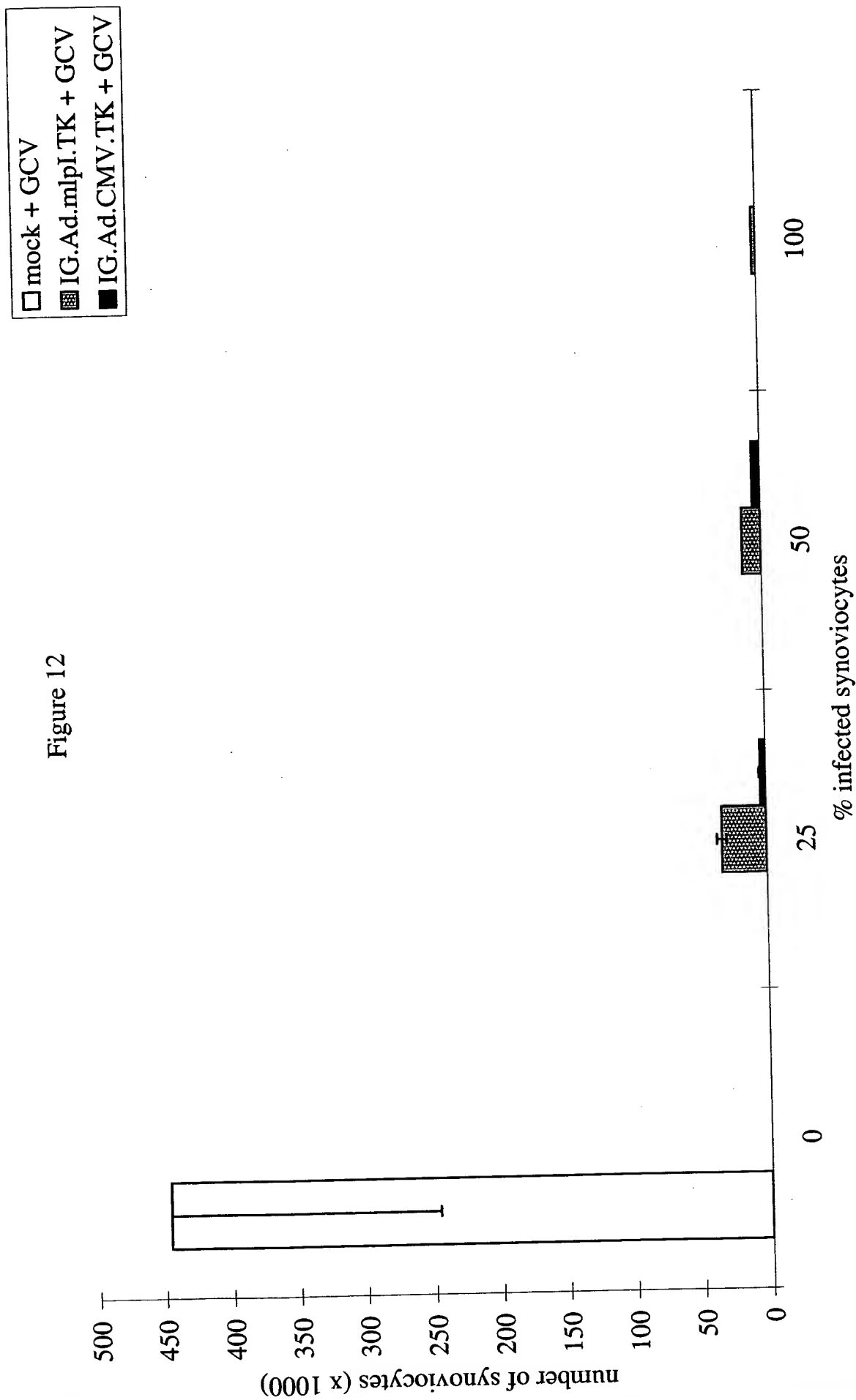


FIGURE 13A

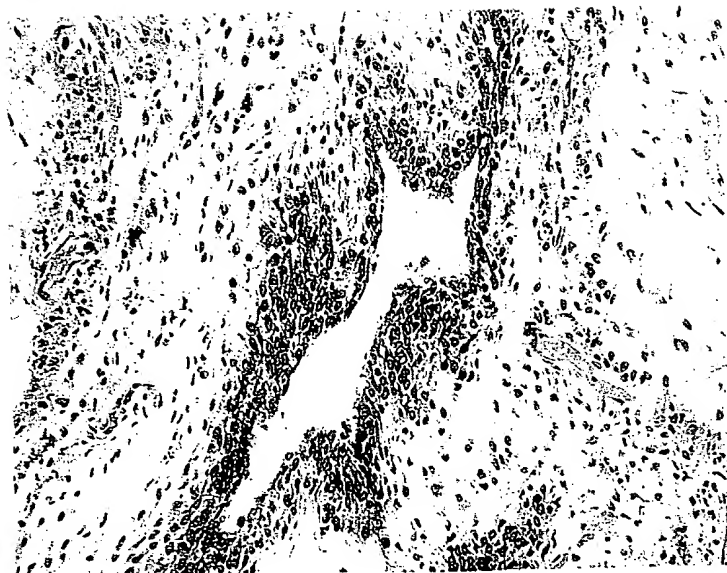


FIGURE 13B

Figure 14: Comparison of infection of Ad5.luc and Ad5.fib16.luc on RA synoviocytes

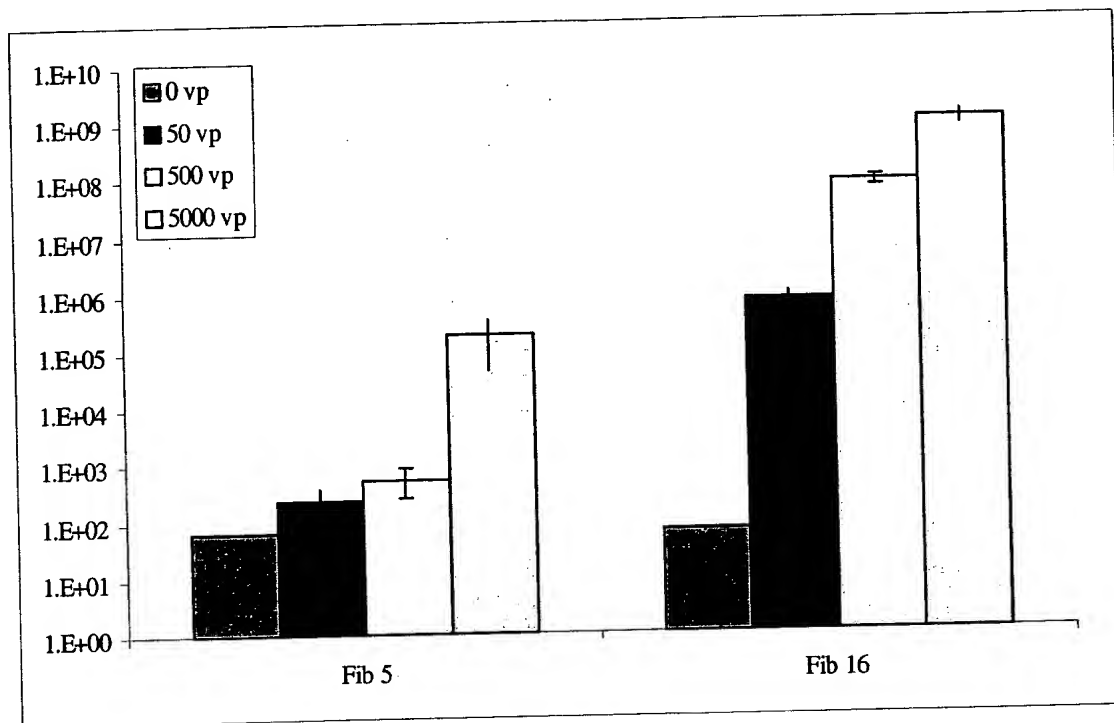


Figure 15

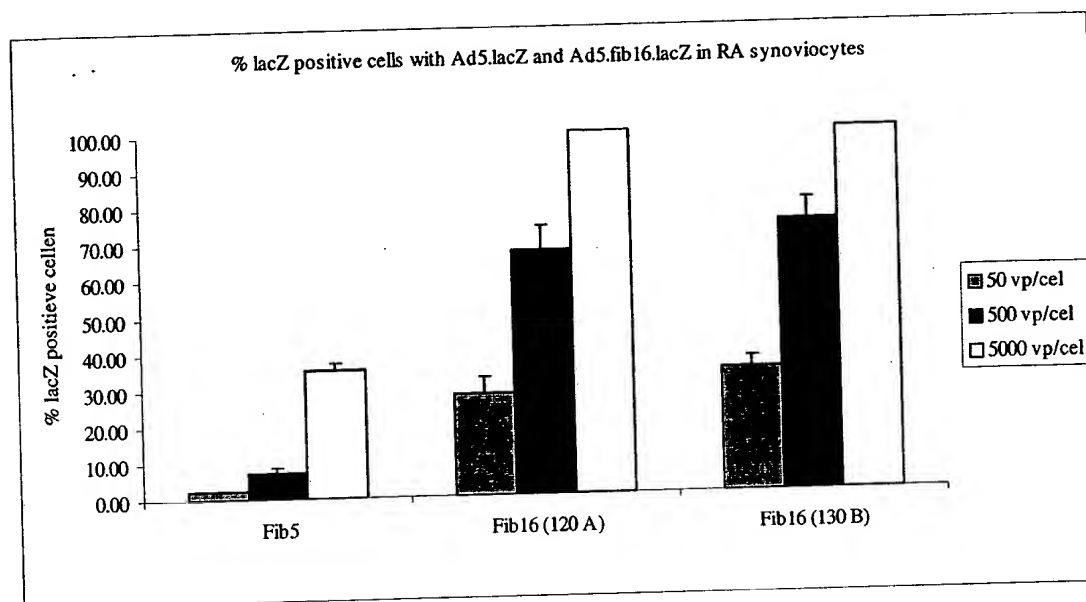




Figure 16A

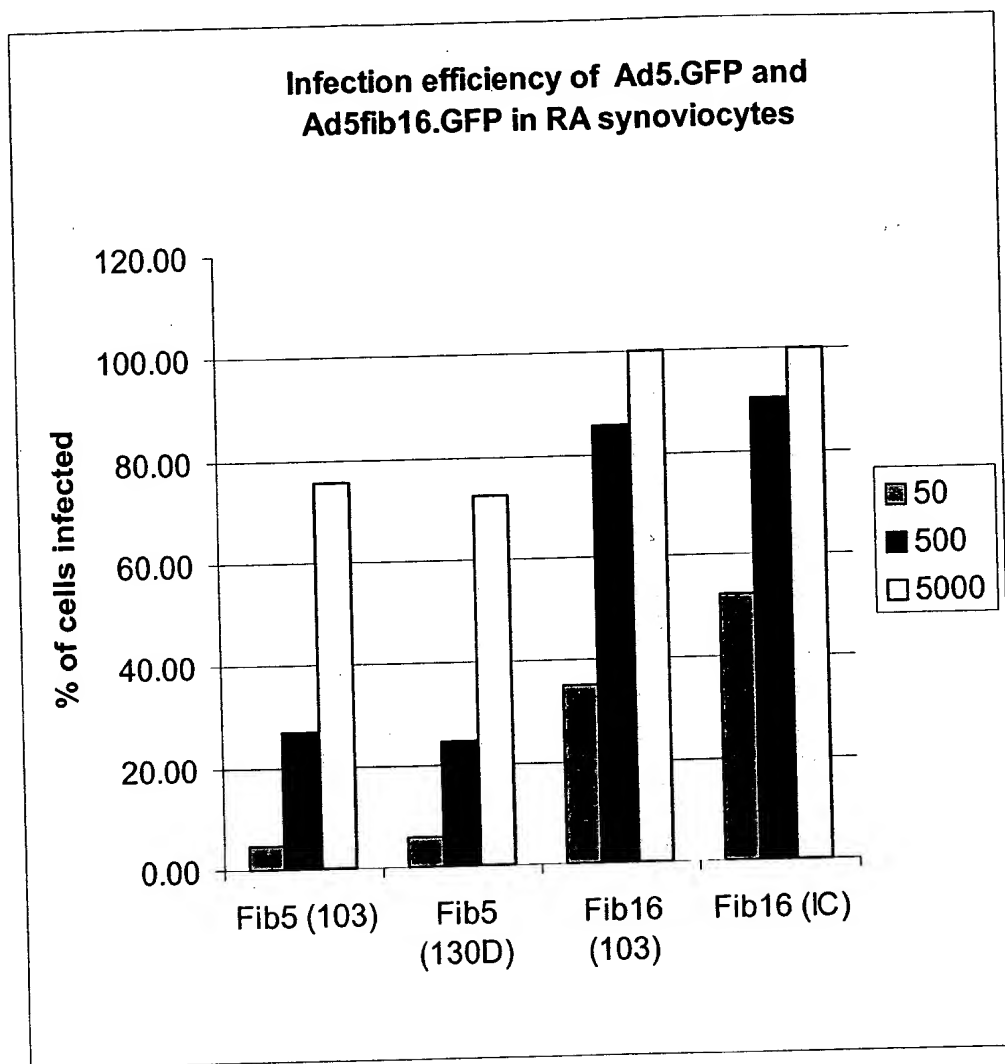


Figure 16B

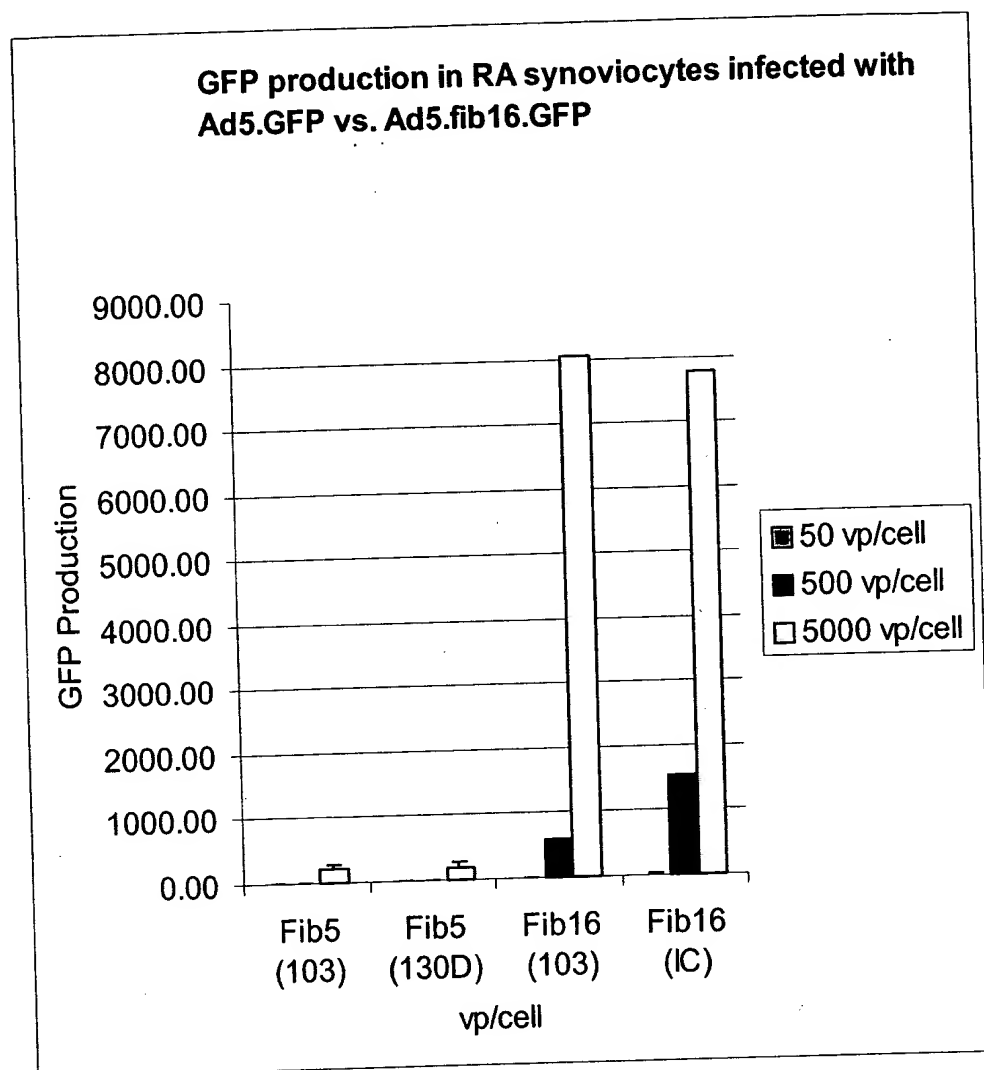


Figure 17: infectivity of panel of chimeric adenoviruses on RA synoviocytes

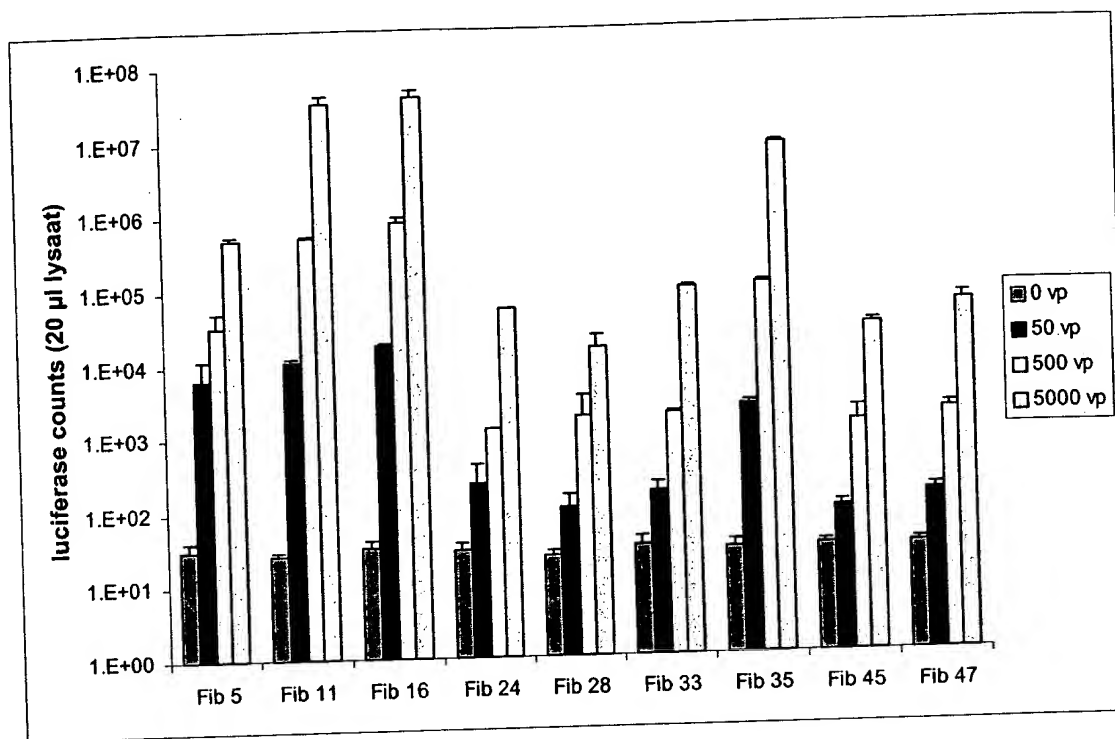


Figure 18A

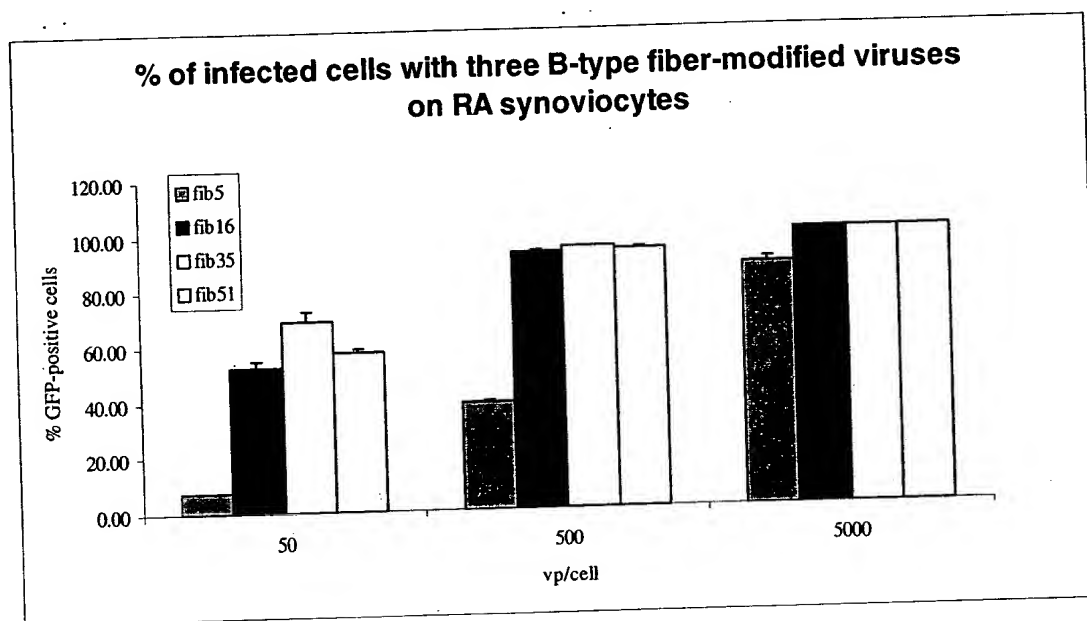


Figure 18B: GFP production with three B-type fiber-modified viruses on RA synoviocytes

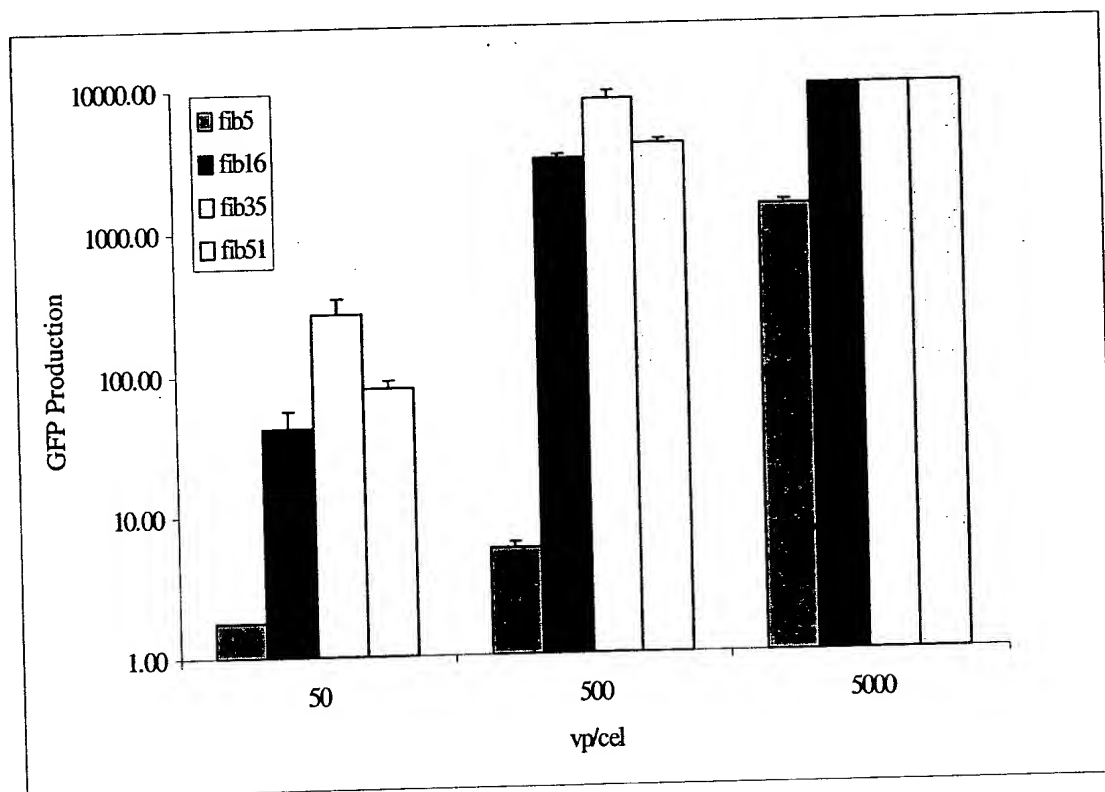


Figure 19

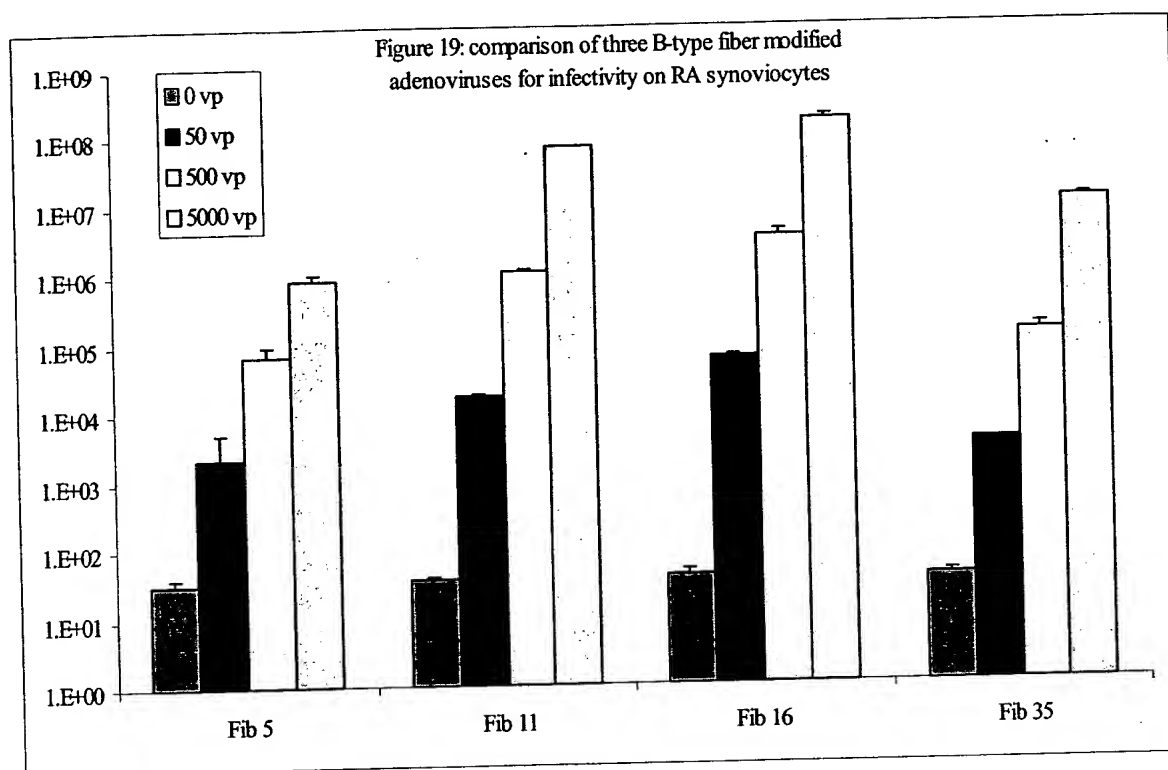


Figure 20: comparison of infectivity Ad5.lacZ vs. Ad5.fib16.lac6 in RA synoviocytes from

